IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: William K. Bodin, *et al.*	§	Group Art Unit: 2143
	§	
	§	Examiner: Murray, Daniel C.
Serial No.: 10/612,700	§	
	§	Atty Docket No.: AUS920030244US1
Filed: 07/02/2003	§	
	§	Customer No.: 34533
Title: Administering Devices With Domain State Objects	§	
	§	Confirmation No.: 5879

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P.O. Box 1450
Alexandria, Virginia 22313-1450

APPEAL BRIEF

Honorable Commissioner:

This is an Appeal Brief filed pursuant to 37 CFR § 41.37 in response to the Final Office Action of April 16, 2008 (hereinafter the "Office Action"), and pursuant to the Notice of Appeal filed July 16, 2008.

REAL PARTY IN INTEREST

The real party in interest in accordance with 37 CFR § 41.37(c)(1)(i) is the patent assignee, International Business Machines Corporation ("IBM"), a New York corporation having a place of business at Armonk, New York 10504.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences within the meaning of 37 CFR § 41.37(c)(1)(ii).

STATUS OF CLAIMS

Status of claims in accordance with 37 CFR § 41.37(c)(1)(iii): Twenty-one (21) claims are filed in the original application in this case. Claims 1-21 are rejected in the Office Action. Claims 1-21 are on appeal.

STATUS OF AMENDMENTS

Status of amendments in accordance with 37 CFR § 41.37(c)(1)(iv): No amendments were submitted after final rejection. The claims as currently presented are included in the Appendix of Claims that accompanies this Appeal Brief.

SUMMARY OF CLAIMED SUBJECT MATTER

Appellants provide the following concise summary of the claimed subject matter according to 37 CFR § 41.37(c)(1)(v). This summary includes a concise explanation of the subject matter defined in each of the independent claims involved in the appeal and includes references to the specification by page and line number and to the drawings by elements. The three independent claims involved in this appeal are claims 1, 8, and 15. Claim 1 is a method claim. Claims 8 and 15 recite counterpart aspects of the method of claim 1. Claim 8 recites system aspects of the method of claim 1. Claim 15 recites computer program product aspects of the method of claim 1.

Claim 1 recites a method for administering devices (page 76, lines 4-5; Figure 13). The method of claim 1 includes creating, in a first domain, a domain state object, the first domain including a plurality of network-connected devices, the domain state object including information that describes the state of the devices in the first domain and

specifies a user in the first domain, the devices in the first domain having been altered in response to the physical condition of the user in the first domain (page 76, line 5 – page 79, line 27; Figure 13, elements 910, 912, and 914). The method of claim 1 also includes transmitting the domain state object from the first domain to a second domain that also includes a plurality of network-connected devices, at least one of the devices in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain (page 77, line 16 – page 79, line 27; Figure 13, elements 916, 914, 912, and 918).

Claim 8 recites a system for administering devices (page 76, lines 4-5; Figure 13). The system of claim 8 includes means for creating, in a first domain, a domain state object, the first domain including a plurality of network-connected devices, the domain state object including information that describes the state of the devices in the first domain and specifies a user in the first domain, the devices in the first domain having been altered in response to the physical condition of the user in the first domain (page 76, line 5 – page 79, line 27; Figure 13, elements 910, 912, and 914). The system of claim 8 also includes means for transmitting the domain state object from the first domain to a second domain that also includes a plurality of network-connected devices, at least one of the devices in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain (page 77, line 16 – page 79, line 27; Figure 13, elements 916, 914, 912, and 918).

Claim 15 recites a computer program product for administering devices (page 76, lines 4-5; Figure 13). The computer program product of claim 15 includes means, recorded on the recording medium, for creating, in a first domain, a domain state object, the first domain including a plurality of network-connected devices, the domain state object including information that describes the state of the devices in the first domain and specifies a user in the first domain, the devices in the first domain having been altered in response to the physical condition of the user in the first domain (page 76, line 5 – page 79, line 27; Figure 13, elements 910, 912, and 914). The computer program product of claim 15 also includes means, recorded on the recording medium, for transmitting the

domain state object from the first domain to a second domain that also includes a plurality of network-connected devices, at least one of the devices in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain (page 77, line 16 – page 79, line 27; Figure 13, elements 916, 914, 912, and 918).

GROUNDS OF REJECTION

In accordance with 37 CFR § 41.37(c)(1)(vi), Appellants provide the following concise statement for each ground of rejection:

1. Claims 1-21 are rejected for obviousness under 35 U.S.C. § 103(a) as being unpatentable over Phipps, *et al.* (U.S. Patent No. 6,579,231) in view of Levitas, *et al.* (U.S. Patent No. 6,053,887).

ARGUMENT

Appellants present the following argument pursuant to 37 CFR § 41.37(c)(1)(vii) regarding the ground of rejection on appeal in the present case.

Argument Regarding The First Ground Of Rejection On Appeal: Claims 1-21 Are Rejected Under 35 U.S.C. § 103(a) As Being Unpatentable Over Phipps In View Of Levitas

Claims 1-21 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Phipps, *et al.* (U.S. Patent 6,579,231 B1) in view of Levitas, *et al.* (U.S. Patent 6,053,887). The question of whether Appellants claims are obvious *vel non* is examined in light of: (1) the scope and content of the prior art; (2) the differences between the claimed invention and the prior art; (3) the level of ordinary skill in the art; and (4) any relevant secondary considerations, including commercial success, long felt but unsolved needs, and failure of other. *KSR Int'l Co. v. Teleflex Inc.*, No. 04-1350, slip op. at 2 (U.S. April 30, 2007). Although Appellants recognize that such an inquiry is an expansive and flexible one, the Office Action must nevertheless demonstrate a prima facie case of obviousness to reject

Appellants claims under for obviousness under 35 U.S.C. § 103(a). *In re Khan*, 441 F.3d 977, 985-86 (Fed. Cir. 2006). To establish a prima facie case of obviousness, the proposed combination of Phipps and Levitas must teach or suggest all of Appellants' claim limitations. *Manual of Patent Examining Procedure* § 2142 (citing *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974)). As shown below in more detail, the proposed combination of Phipps and Levitas cannot establish a prima facie case of obviousness because the proposed combination of Phipps and Levitas does not teach each and every element of the claims of the present application. As such, Appellants respectfully traverse each rejection individually.

The Proposed Combination Of Phipps and Levitas Does Not Teach Or Suggest Each And Every Element Of Claim 1 Of The Present Application

To establish a prima facie case of obviousness under 35 U.S.C. § 103 the reference must teach or suggest all of Appellants' claim limitations. *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974). Independent claim 1 of the present application recites:

1. A method for administering devices, the method comprising:

creating, in a first domain, a domain state object, the first domain including a plurality of network-connected devices, the domain state object including information that describes the state of the devices in the first domain and specifies a user in the first domain, the devices in the first domain having been altered in response to the physical condition of the user in the first domain; and

transmitting the domain state object from the first domain to a second domain that also includes a plurality of network-connected devices, at least one of the devices in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain.

As explained in more detail below, the combination of Phipps and Levitas as proposed in the Office Action does not teach or suggest administering devices with domain state objects, as claimed in the present application. Phipps, in general, discloses collecting a subject's physiological data from a medical monitoring device worn by the subject and transmitting the data to a central reporting system for long term collection and storage of the subject's physiological data. Levitas, in general, discloses controlling a medical device that administers medical treatment to a patient in one room, with a remote in a second room. That is, both Phipps and Levitas always disclose monitoring and prescribing treatment to a patient in a first room. Neither Phipps nor Levitas, however, is concerned with, or teaches or suggests altering the user's environment in a second domain. Appellants therefore respectfully traverse each rejection individually and request that the rejections be withdrawn.

Levitas Does Not Disclose At Least One Of The Devices In The Second Domain Administered To Alter The User's Environment In The Second Domain In Dependence Upon The Information Describing The State Of The Devices In The First Domain

The Office Action admits at page 3 that Phipps does not disclose the following limitation from the present application: at least one of the devices in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain. However, the Office Action takes the position that Levitas at the Abstract and column 2, lines 16-65, discloses the limitation. Appellants respectfully note in response, that what Levitas at the abstract in fact discloses is:

> A medical treatment apparatus is provided with a programmable medical device disposed at a first room location and a remote monitor and/or controller disposed at a second room location. The programmable medical device is used to administer a medical treatment to a patient, and the remote monitor/controller maybe used to monitor the operation of the medical device, control the operation of the medical device, and/or to transfer data from the medical device to the remote monitor/controller. The apparatus may allow voice communication between the remote

> monitor/controller and the patient who is receiving treatment via the medical device while the medical device is being monitored and/or controlled from the remote location. The remote monitor/controller may also include means for determining the type of medical device to which it is connected. The programmable medical device includes various types of sensors for generating patient medical condition data which is transmitted to the remote monitor/controller. The medical treatment provided to the patient can be changed in response to analysis of the patient medical data at the remote location.

In addition, what Levitas at column 2, lines 16-65 in fact discloses is:

> The invention is directed to a medical treatment apparatus having programmable medical treatment means for automatically administering a medical treatment directly to a patient, the programmable medical treatment means being disposed at a first room location, a sensor for detecting a medical condition of the patient, the sensor being disposed at the first room location and being connected to the patient, and a remote controller for controlling the programmable medical treatment means, the remote controller being disposed at a second room location remote from the first room location at which the programmable medical treatment means is disposed. The remote controller includes means for controlling the programmable medical treatment means to allow the medical treatment being administered to the patient to be changed, and the medical treatment apparatus also includes remote monitoring means operatively coupled to the sensor for monitoring the medical condition detected by the sensor, the remote monitoring means being disposed at the second room location.
>
> The programmable medical treatment means may be an infusion pump for infusing a drug into the patient, the infusion pump being composed of a liquid injection device adapted to be connected to the patient, a conduit connected to the liquid injection device, a pumping mechanism for pumping a liquid drug through the conduit and into the patient via the liquid injection device, and a controller for controlling the pumping mechanism.
>
> The invention is also directed to a method of administering a medical treatment to a patient via a programmable medical treatment apparatus. The method includes the steps of: (a) automatically administering a medical treatment to a patient with a programmable medical treatment apparatus disposed at a first room location, (b) detecting a medical condition of the patient with a sensor at the first room location, (c) transmitting medical condition data relating to the medical condition from the first room location to a second room location, and (d) transmitting a control command from the second room location to the programmable

> medical treatment apparatus at the first room location to change the medical treatment automatically administered during step (a), the control command being based upon the medical condition data transmitted during step (c).
>
> The method may also include the step of analyzing the medical condition data prior to transmitting the control command, the step of displaying the medical condition data on a visual display disposed at the second room location, and the step of storing the medical condition data in the memory of a remote monitor/controller disposed at the second room location.

That is, Levitas at the Abstract and column 2, lines 16-65 discloses a medical treatment apparatus that includes a sensor connected to the patient in a first room, a medical device located in a first room that administers a medical treatment to the patient, and a remote control located in a second room for controlling the medical device, which is located in the first room. Levitas' medical treatment apparatus that includes a sensor connected to the patient in a first room, a medical device located in a first room that administers a medical treatment to the patient, and a remote control located in a second room for controlling the medical device, which is located in the first room, does not disclose a device in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain, as claimed in the present application. As claimed in the present application, a user's environment in a second domain is altered by a device in the second domain. In contrast to a user's environment in a second domain that is altered by a device in the second domain, Levitas medical treatment device prescribes medical treatment to the patient in only one room – the room the patient and medical treatment device is located in. That is, Levitas' medical treatment device only alters the user's environment in the first room – not the second domain. Because Levitas' medical treatment device alters a user's environment in the first room, Levitas' medical treatment device does not disclose a device in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain, as claimed in the present application

In fact, the only device that Levitas discloses that is in a second room, is the remote control that is used to control the medical treatment device. Levitas' remote control, however, only *controls* the medical device, which is located in the *first* room. That is, Levitas' remote control does not *alter* the user's environment in the *second* room. Because Levitas' remote control only controls the medical treatment device located in a first room, and does not alter the environment of another room, Levitas' remote control is not a device in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain, as claimed in the present application. Because Levitas' medical treatment device alters the user's environment in a first room – not the second domain, and Levitas' remote control *controls* a device in the *first* room – not *alters* the users' environment in a second domain, neither Levitas' medical treatment device nor Levitas' remote control discloses a device in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain, as claimed in the present application. The proposed combination of references therefore cannot be used to establish a prima facie case of obviousness against claim 1 of the present application. For the reasons stated above, the rejection of Appellants' claims under 35 U.S.C. § 103 should be withdrawn and the claims should be allowed.

Relations Among Claims

Independent claims 8 and 15 are system and computer program product claims for administering devices that correspond to independent method claim 1. Claim 1 is allowable for the reasons set forth above. Claims 8 and 15 are allowable because claim 1 is allowable. The rejections of claims 8 and 15 therefore should be withdrawn, and claims 8 and 15 should be allowed.

Claims 2-7, 9-14, and 16-21 depend from independent claims 1, 8, and 15, respectively. Each dependent claim includes all of the limitations of the independent claim from which it depends. Because the combination of Phipps and Levitas does not teach or suggest each and every element of the independent claims, so also the combination of Phipps and

Levitas does not teach or suggest each and every element of the dependent claims of the present application. The rejection of claims 2-7, 9-14, and 16-21 therefore should be withdrawn, and these claims also should be allowed.

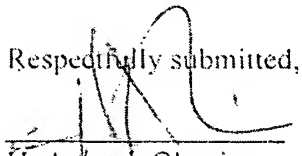
Conclusion of Appellants' Arguments

Claims 1-21 stand rejected under 35 U.S.C. § 103 as being unpatentable over Phipps in view of Levitas. For the reasons set forth above, however, the proposed modification of Phipps and Levitas fails to establish a prima facie case of obviousness. The rejection of claims 1-21 should therefore be withdrawn, and the claims should be allowed. Appellants respectfully traverse each rejection individually and request reconsideration of claims 1-21.

In view of the arguments above, reversal on all grounds of rejection is requested.

The Commissioner is hereby authorized to charge or credit Deposit Account No. 09-0447 for any fees required or overpaid.

Respectfully submitted,

Date: September 16, 2008 By: 

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APPENDIX OF CLAIMS ON APPEAL IN PATENT APPLICATION OF WILLIAM KRESS BODIN, *ET AL.*, SERIAL NO. 10/612,700

CLAIMS

What is claimed is:

1. A method for administering devices, the method comprising:

creating, in a first domain, a domain state object, the first domain including a plurality of network-connected devices, the domain state object including information that describes the state of the devices in the first domain and specifies a user in the first domain, the devices in the first domain having been altered in response to the physical condition of the user in the first domain; and

transmitting the domain state object from the first domain to a second domain that also includes a plurality of network-connected devices, at least one of the devices in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain.

2. The method of claim 1 wherein creating, in a first domain, a domain state object comprises:

creating a current device state object; and

associating the current device state object with the domain state object.

3. The method of claim 2 wherein creating a current device state object comprises:

identifying a device in the first domain;

getting a current value of an attribute of the device; and

storing the value in the current device state object.

4. The method of claim 1 wherein creating, in a first domain, a domain state object comprises associating a user metric vector with the domain state object.

5. The method of claim 1 wherein creating, in a first domain, a domain state object comprises associating a user metric space with the domain state object.

6. The method of claim 1 wherein transmitting the domain state object from the first domain to a second domain comprises downloading the domain state object to a mobile sensor.

7. The method of claim 1 wherein transmitting the domain state object from the first domain to a second domain comprises downloading an address of the domain state object to a mobile sensor.

8. A system for administering devices, the system comprising:

means for creating, in a first domain, a domain state object, the first domain including a plurality of network-connected devices, the domain state object including information that describes the state of the devices in the first domain and specifies a user in the first domain, the devices in the first domain having been altered in response to the physical condition of the user in the first domain; and

means for transmitting the domain state object from the first domain to a second domain that also includes a plurality of network-connected devices, at least one of

the devices in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain.

9. The system of claim 8 wherein means for creating, in a first domain, a domain state object comprises:

means for creating a current device state object: and

means for associating the current device state object with the domain state object.

10. The system of claim 9 wherein means for creating a current device state object comprises:

means for identifying a device in the first domain;

means for getting a current value of an attribute of the device; and

means for storing the value in the current device state object.

11. The system of claim 8 wherein means for creating, in a first domain, a domain state object comprises means for associating a user metric vector with the domain state object.

12. The system of claim 8 wherein means for creating, in a first domain, a domain state object comprises means for associating a user metric space with the domain state object.

13. The system of claim 8 wherein means for transmitting the domain state object from the first domain to a second domain comprises means for downloading the domain state object to a mobile sensor.

14. The system of claim 8 wherein means for transmitting the domain state object from the first domain to a second domain comprises means for downloading an address of the domain state object to a mobile sensor.

15. A computer program product for administering devices, the computer program product comprising:

a recording medium;

means, recorded on the recording medium, for creating, in a first domain, a domain state object, the first domain including a plurality of network-connected devices, the domain state object including information that describes the state of the devices in the first domain and specifies a user in the first domain, the devices in the first domain having been altered in response to the physical condition of the user in the first domain; and

means, recorded on the recording medium, for transmitting the domain state object from the first domain to a second domain that also includes a plurality of network-connected devices, at least one of the devices in the second domain administered to alter the user's environment in the second domain in dependence upon the information describing the state of the devices in the first domain.

16. The computer program product of claim 15 wherein means, recorded on the recording medium, for creating, in a first domain, a domain state object comprises:

means, recorded on the recording medium, for creating a current device state object; and

means, recorded on the recording medium, for associating the current device state object with the domain state object.

17. The computer program product of claim 16 wherein means, recorded on the recording medium, for creating a current device state object comprises:

means, recorded on the recording medium, for identifying a device in the first domain;

means, recorded on the recording medium, for getting a current value of an attribute of the device; and

means, recorded on the recording medium, for storing the value in the current device state object.

18. The computer program product of claim 15 wherein means, recorded on the recording medium, for creating, in a first domain, a domain state object comprises means, recorded on the recording medium, for associating a user metric vector with the domain state object.

19. The computer program product of claim 15 wherein means, recorded on the recording medium, for creating, in a first domain, a domain state object comprises means, recorded on the recording medium, for associating a user metric space with the domain state object.

20. The computer program product of claim 15 wherein means, recorded on the recording medium, for transmitting the domain state object from the first domain to a second domain comprises means, recorded on the recording medium, for downloading the domain state object to a mobile sensor.

21. The computer program product of claim 15 wherein means, recorded on the recording medium, for transmitting the domain state object from the first domain to a second domain comprises means, recorded on the recording medium, for downloading an address of the domain state object to a mobile sensor.

APPENDIX OF EVIDENCE ON APPEAL IN PATENT APPLICATION OF WILLIAM KRESS BODIN, *ET AL.*, SERIAL NO. 10/612,700

This is an evidence appendix in accordance with 37 CFR § 41.37(c)(1)(ix).

There is in this case no evidence submitted pursuant to 37 CFR §§ 1.130, 1.131, or 1.132, nor is there in this case any other evidence entered by the examiner and relied upon by the Appellants.

RELATED PROCEEDINGS APPENDIX

This is a related proceedings appendix in accordance with 37 CFR § 41.37(c)(1)(x). There are no decisions rendered by a court or the Board in any proceeding identified pursuant to 37 CFR § 41.37(c)(1)(ii).